STIC Search Report
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Search Notes

Pat# 5704720

553584 (08) 5704720 January 6, 1998

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5704720

Link to Claims Section

January 6, 1998

Sliding bearing

APPL-NO: 553584 (08)

FILED-DATE: February 26, 1996

GRANTED-DATE: January 6, 1998

CORE TERMS: sliding, peak, groove, rotating, shaft, height, measured, resistance, helical, oil ...

ENGLISH-ABST:

A helical groove 1B is formed in the sliding surface 1A of a sliding bearing 1 over the entire axial region thereof. To establish the height of a peak 1a defined by the helical groove 1B, an imaginary reference line L extending parallel to the axis is formed which is determined such that the total cross-sectional area of all the peaks 1a is equal to the total cross- sectional area of all the valleys 1b when the helical groove 1B is considered in axial section. A height, as measured from the reference line L to the top 1a' of the peak 1a is chosen in the range of from 1 to 8 [mgr]m. The space created by forming the valleys 1b allows the supply of lubricant oil to be increased, thereby simultaneously achieving a reduction in the frictional resistance and the occurrence of an impact sound.

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Edit Search

Query/Command : PRT SS 1 MAX 1 LEGALALL

1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image

Patent Number :
US5704720 A 19980106 [US5704720]

Title :
(A) Sliding bearing

Patent Assignee :
(A) TAIHO KOGYO CO LTD (JP)

Patent Assignee :
Taiho Kogyo Company, Ltd., Toyota [JP]

Inventor(s) :
(A) KUMADA YOSHIO (JP); HASHIZUME KATSUYUKI (JP); KAMIYA SOJI (JP)

Application Nbr :
US55358496 19960226 [1996US-0553584]

Filing Details :
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WO95/25904 19950928 [WO9525904]

Priority Details :
JP7396294 19940318 [1994JP-0073962]
WOJP9500467 19950317 [1995WO-JP00467]

Intl Patent Class :
(A) F16C-017/00

EPO ECLA Class :
F16C-033/10B2

US Patent Class :
ORIGINAL (O) : 384625000

Document Type :
Corresponding document

Citations :
US4400099; US4538929; US4561787; US4606653; US5071263; US5116144; US5238311; AT385822 B; EP0155257 B1; EP0155257 A2; JP60-205014; JP63-6215; JP63-30619; JP63-11530; JP2-142921; JP4-39461; JP5-6412; JP5-8337; JP6-19850

Publication Stage :
(A) United States patent

Abstract :
A helical groove 1B is formed in the sliding surface 1A of a sliding bearing 1 over the entire axial region thereof. To establish the height of a peak 1a defined by the helical groove 1B, an imaginary reference line L extending parallel to the axis is formed which is determined such that the total cross-sectional area of all the peaks 1a is equal to the total cross-sectional area of all the valleys 1b when the helical groove 1B is considered in axial section. A height, as measured from the reference line L to the top 1a' of the peak 1a is chosen in the range of from 1 to 8 MU m. The space created by forming the valleys 1b allows the supply of lubricant oil to be increased, thereby simultaneously achieving a reduction in the frictional resistance and the occurrence of an impact sound.

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Patent Number :
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Application Number :
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Action Taken :
20021015 US/RF-A

REISSUE APPLICATION FILED
EFFECTIVE DATE: 20020802
Update Code :
2003-22

1 / 1 CRXX - ©CLAIMS/RRX
Patent Number :
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Patent Assignee :
Taiho Kogyo Co Ltd JP
Actions :
20020802 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20021015
REISSUE REQUEST NUMBER: 10/210813
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 3622

Reissue Patent Number:

1 / 1 INPADOC - ©INPADOC
Patent Number :
US 5704720 A 19980106 [US5704720]
Title :
Sliding bearing
Inventor(s) :
KUMADA YOSHIO [JP]; HASHIZUME KATSUYUKI [JP]; KAMIYA SOJI [JP]
Patent Assignee (Words) :
TAIHO KOGYO CO LTD [JP]
Application Details :
US 553584/96-A 19960226 [1996US-0553584]
Priority Details :
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Intl. Patent Class. :
F16C-017/00

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